XXII. Observations on the Vicia angustifolia of the English Flora of Sir James Edward Smith, P.L.S. By Edward Forster, Esq., F.R.S. V.P.L.S.

Read December 15, 1829.

Encouraged by the readiness always shown by our late revered President to listen to any suggestions made by me, though they were contrary to his own preconceived opinions, I venture to offer to the Linnean Society some remarks on the Vicia angustifolia of the English Flora, to which I have been led by perceiving a Vicia lately figured under that name in the Supplement to English Botany, for the continuation of which useful work the public are greatly indebted to the sons of the able coadjutor of Sir James Edward Smith. I trust the eminent botanists who have furnished and described the Vicia, n. 2614. of that publication, will receive the freedom of my statements with the same candour with which they would have been met by my late friend.

When, fortunately for the botany of Great Britain, the herbarium of Linnæus came into the possession of our founder, he very soon perceived that some few plants had been erroneously referred to the *Species Plantarum* of Linnæus, by Hudson in his *Flora Anglica*,—a book which is less consulted by authors of the present time than it ought to be,—for it is certainly a work of great merit, and it may fairly excite wonder that more misapplication of the Linnæan nomenclature does not occur in it.

It was ascertained by the examination of the herbarium, that the Vicia lathyroides of Hudson was not the plant intended by Linnæus, which in the first edition of the Flora Anglica, published in 1762, is referred to Ervum soloniense, and in the second edition of 1778 is placed as a variety of Vicia lathyroides: this was not improperly referred to Ervum soloniense, for it seems that Vicia lathyroides and Ervum soloniense are the same plant, (vide English Flora, vol. 3. p. 283.) Hudson's error consisted in calling the Vicia sylvestris, sive Cracca major of Ray, Vicia lathyroides, and in his second edition placing the Vicia minima of Rivinus, the true Linnæan V. lathyroides, as a variety. being the case, Smith in his Flora Britannica and in English Botany published the Vicia minima of Rivinus, Vicia minima præcox Parisiensium of Dillenius in Ray's Synopsis, as the V. lathyroides of Linnæus. So far he did well: but finding that Linnæus in his Species Plantarum had placed the Vicia semine rotundo nigro of Bauhin's Pinax, which is the Vicia sylvestris, sive Cracca major of Ray, together with Vicia folio angustiore, flore rubro of Dillenius, as one variety of V. sativa, accompanied with an observation, "Varietas β. foliis angustioribus sublinearibus;" and also finding that the first of these is in the herbarium pinned to the sativa, marked H. U. (Hortus Upsaliensis), he followed his great master in continuing both these plants as varieties of that species. Subsequently, however, he was induced by the observations of the late Thomas Furly Forster "to re-examine the matter;" and accordingly in the English Flora he has adopted the Vicia sylvestris, flore ruberrimo, siliqua longa nigra of Ray, or the Vicia folio angustiore, flore rubro of Dillenius, as a species, under the name of Vicia angustifolia, stating it to be the V. angustifolia of Sibthorp, but not of Roth, or Willdenow, or Rivinus; to this he was led by a specimen in his own herbarium, received from Sibthorp, which specimen evidently is the Vicia sylvestris,

sylvestris, flore ruberrimo, siliqua longa nigra; but it may be doubted whether Sibthorp distinguished the two plants; for his specific character, as well as his reference to Roth and Rivinus, belong to one, and the synonyms of Ray and Hudson to the other. We still, however, unfortunately find the Vicia sylvestris, sive Cracca major remaining in the English Flora as a variety of V. sativa.

Having continued to pay attention to this subject ever since the separation of the true Linnæan V. lathyroides from that of Hudson, I have remained steady in my opinion, that the V. sativa β . of Linnæus and Smith is specifically distinct from the cultivated Vetch, though I allow their great affinity.

Having an opportunity of examining the truly invaluable herbarium now deposited in the Museum of this Society, I conceive with Professor Hooker, that it must be satisfactory to the British botanist to know what is the *Vicia angustifolia* of the *English Flora*, and therefore I have been induced to make these observations and to submit the following arrangement, though in so doing I stand opposed to Linnæus, Smith, and Hooker; yet I feel confident, supported as I am by the accurate Ray, the laborious Hudson, together with Roth, and a host of authors ancient and modern: indeed, I have in some measure the sanction of my friend Borrer, who, by presenting the *Vicia*, n. 2614. of *English Botany* to be figured as *V. angustifolia*, clearly takes it away from *V. sativa*, though he was not aware that it is not the *V. angustifolia* of the *English Flora*, but the *V. sativa* β. of that work, and the *V. angustifolia* of Roth and Willdenow.

It being an invariable maxim with me never to swerve from the good practice of keeping the trivial name of the first author who established the species, since the reformation of the botanical nomenclature by Linnæus, I am reluctantly obliged to adopt that of angustifolia from Roth, and therefore to give some other to the V. angustifolia of Smith*. I do not call it nigra, though so designated by Linnæus as a variety, because he included two plants of the old botanists under his β . nigra; and as the rule has never been considered absolute when the name was only that of a variety, I conceive it right to follow Roth, who has taken a much older, and certainly a much better name, though perhaps it is one which is still more applicable to the species to which it is given by Smith.

1. VICIA SATIVA.

- V. leguminibus subsessilibus binatis erectiusculis, foliolis elliptico-oblongis; inferioribus retusis, stipulis dentatis notatis, seminibus globosis lævibus.
- V. sativa. Linn. Sp. Pl. 1037. Huds. Fl. Angl. ed. 1. 278. ed. 2.
 318. Sm. Fl. Brit. 769. Engl. Bot. v. 5. t. 334. Engl. Fl. v. 3. 281. Willd. v. 3. 1104. Hook. Fl. Scot. 215. Pers. Syn. v. 3. 307. DeCand. Prod. v. 2. 360.
- Vicia. R. Syn. ed. 1. 129. ed. 2. 188. ed. 3. 320. Hist. v. 1. 900.
 Dod. Frum. 134. Pempt. 530. Riv. Tetrap. Irr. f. 54.
 Ger. 1052. f. 1. Ger. Em. 1227. f. 1. Lob. Ic. v. 2. 75.
 Camer. Epit. 320. Trag. Hist. 624. Lyte Herb. 483.
- V. vulgaris sativa. Bauh. Hist. v. 2. 310. Park. 1072.
- V. vulgaris, semino nigro. Bauh. Pin. 344.
- V. major sativa vulgaris. Mor. Ox. v. 2. 62. sect. 2. t. 4. f. 12.
- β. "V. sativa vulgaris semine albo. Bauh. Pin. 344." Huds. Anglis Vetch or Tare.

Habitat. On the margins of cultivated fields, self-sown, but not a native.

It does not appear that this is a native of Europe. In the

Smithian

^{*} I am sorry to observe some botanists of the present day totally regardless of this act of justice, adopting without scruple and without reason, the name given by any modern author who happens to be in fashion.

V. syl-

Smithian herbarium there is a specimen marked "Tangier, M. Durand, 1503," but no note whether cultivated or indigenous. I do not understand the variety β , which I have inserted from Hudson; it cannot be the Summer Tare, for the seeds of that as well as of the Winter Tare are black: these differ in habit, the summer variety coming up erect, whereas the winter variety is more procumbent, a circumstance deserving the attention of botanists.

2. VICIA ANGUSTIFOLIA.

- V. leguminibus subsessilibus subbinatis, foliolis lineari-lanceolatis; inferioribus obcordatis, stipulis dentatis notatis, seminibus globosis lævibus.
- V. angustifolia. Riv. Tetrap. Irr. t. 55. Roth. Germ. v. 1. 310.
 v. 2. 186. Willd. v. 3. 1105. Ehrh. Herb. 57. Engl. Bot.
 Suppl. f. 2614. Pers. Syn. v. 2. 307.
- V. lathyroides. Huds. Fl. Angl. ed. 1. 279. ed. 2. 318. (excluding the synonym of Herm. Parad. 242, which belongs to V. lathyroides Linn.). Relh. Cant. ed. 1. 274.
- V. sativa β. nigra. Linn. Sp. Pl. 1. 1037.
- V. sativa β. Sm. Fl. Brit. 770. Engl. Fl. v. 3. 281. Relh. Cant. ed. 2. 281.
- V. sativa δ. angustifolia. DeCand. Prod. v. 2. 361.
- Vicia. Matth. Valg. v. 1. 501.
- V. sylvestris, sive Cracca major. Raii Syn. ed. 1. 129. ed. 2. 188. ed. 3. 321. Hist. v. 1. 902. Lob. Ic. v. 2. 75. Ger. Em. 1227. f.4; and Johnson's additional remarks, excluding Gerarde's own description, and his English name of Strangle Tare or Tine.
- V. vulgaris sylvestris, semine parvo et nigro, frugum. Bauh. Hist. v. 2. 312.
- V. semine rotundo nigro. Bauh. Pin. 345.

V. sylvestris, semine nigro et variegato. Moris. Ox. v. 2. 63. sect. 2. t. 4. f. 11.

Aphaca vera, Vicia Matthiolo. Dalech. Hist. 478.

Arachus. Lyte's Herb. 483.

Arachus, seu Cracca major. Park. 1071.

Craccæ primum genus. Dod. Frum. 161. Pempt. 542. Anglis Wild Vetch.

Habitat. In dry pastures and cornfields, common.

Confusion seems to have taken place very early in regard to this species; for in Gerarde's own edition of his Herball, the Vicia sylvestris, Strangle Tare, Tine or Wild Fetch, can scarcely be intended for it, the figure being totally unlike it, resembling Ervum hirsutum, to which his description is more applicable. "Strangle Tare, called in some countries Tine, and of others Wilde Vetch, is a ramping herbe like unto the common Tare, ramping and climing among corne where it chanceth, that it plucketh it downe to the ground, and overgroweth the same in such sort, that it spoileth and killeth not onely Wheate, but all other graine whatsoever: the herbe is better knowne than desired, therefore these few lines may serve for the description." This is probably taken from Dodoens, who in his Historia Frumentorum Leguminum Palustrium et Aquatilium Herbarum ac eorum quæ eo pertinent, printed in 1569 under Craccæ alterum genus, has an excellent figure of Ervum hirsutum, with the following observation: "Provenit utrumque vicium una cum segetibus, quibus cœli statu humido admodum perniciosum est, tunc enim cito incrementum sumens confestim segetem præoccupat, teneramque pertinaci vinctu crebrisque circumvolutionibus, deorsim trahit, delapsamque erigi non patitur ac calamitosam ipsam efficit." Johnson in his edition of the Herball has erroneously changed the figure of Vicia sylvestris, adding, 66 sive

"sive Cracca major" to the name, and substituting the very block of Dodoens's Cracca primum genus, which is generally supposed to be Vicia angustifolia; and from the breadth of the leaflets I have been induced to refer to it as such, notwithstanding that the pods are solitary.

Lyte in his Niewe Herball, or Historie of Plants, 1578, which is a translation of a French version of the Cruydeboeck of Dodoens, has this plant: the figure it is true is not very good, and is the same as Turner in his Herball, 1568, puts for the cultivated Vetch; yet his description leaves no doubt on the subject: "Arachus is much lyke to the Common Vetche, in stalkes, leaves, and coddes, but in all these much lesse. stalkes be tender, weake and slender, with cornered trayles or square crested edges. The leaves are spread abroade like the other Vetche, but cloven and parted above at the endes, into two or three clasping tendrelles. The flowers be smal, of a light purple, or incarnate colour, and do growe uppon the stalke selfe, as the flowers of beanes or common Vetches do, without any foote stalkes. The coddes be small, long and narrowe, wherein is couched sixe or seven seedes of a blackishe colour, harde and smaller than Vetches."

John Bauhin observes: "A Viciâ sativâ semine potissimum differre videtur, quòd admodum parvum et rotundum, copiosum (ad octona eximere memini) in siliquis angustioribus, longioribus, magisque teretibus, quàm viciæ sepium, minus hirsutis et ferè glabris, quæ siccæ nigrescunt."

Ray says: "Hujus speciem seu varietatem majorem observavimus (ego et D. Dale) in marginibus agrorum quorundam supra molam fullonicam Bockingæ in Essexia." What this is I know not. Then follows in another paragraph, copied from his edition of 1690, in which the discovery of the large variety is not noticed: "Viciæ sativæ similis est; flores habet pulchrè

purpureos, umbilico albo, ad singulas foliorum alas plerumque binos rarò ternos, in solo steriliore singulos duntaxat; siliquas longas, teretiusculas, rectas, semina octo aut decem continentes, ex fusco- et luteo-viridi varia, non penitus nigra, prout ea describit J. Bauhinus. Variat ergo seminum colore." The difference from Vicia sativa is also pointed out in Ray's Historia Plantarum.

Hudson, who it must be remembered includes Vicia angustifolia Roth, V. angustifolia Smith, and V. lathyroides Linn., remarks: "variat foliis imis obcordatis, retusis et obovatis, superioribus linearibus et lanceolatis, quaternis, senis, octonis, et subinde denis; floribus solitariis et geminis; stipulis maculatis, nimis affinis Viciæ sativæ.

3. VICIA BOBARTII.

- V. leguminibus subsessilibus solitariis, foliolis linearibus; inferioribus obcordatis, stipulis dentatis notatis, seminibus globosis lævibus.
- V. angustifolia. Sm. Eng. Fl. v. 3. 282. Spreng. Syst. v. 3. 264 (excluding the reference to Roth). Sibth. Ox. 224 (excluding the synonyms of Roth and Rivinus).
- V. angustifolia β acuta. Pers. Syn. v. 2. 307.
- V. lathyroides. Dicks. Hort. Sicc. fasc. 4. 12.
- V. lathyroides β . Huds. Fl. Angl. ed. 1. 279. ed. 2. 319.
- V. sativa y. Sm. Fl. Brit. 770.
- V. sylvestris, flore ruberrimo, siliquâ longâ nigrâ D. Bobart. Raii Syn. ed. 2. 188. ed. 3. 321.
- V. folio angustiore, flore rubro. Dill. Giss. App. 47.
- V. vulgaris, acutiore folio, semine parvo nigro. Bauh. Pin. 345. Habitat. On heaths and in pastures, on a gravelly or chalky soil.

I apprehend the following remark of John Bauhin applies to this plant: "Huic" (V. angustifolia Roth) "affinis, si non eadem,

eadem, angustissimis foliis ac tenuissimis, longiusculis, flore pulchro, purpureo, à me reperta, cum essem Monspelii, inter saxa."

So also Ray: "An eadem præcedentis speciei? Varietatis secundæ."

I have arranged this as a species in deference to the great authority of Smith rather than from my own judgement, being, with John Bauhin and Ray, inclined to doubt whether it be right to do so. As the name of angustifolia is already applied, I have called it Bobartii, in honour of Bobart, whose name Ray has taken, and who was probably the discoverer of it in Oxfordshire*.

Whether it be considered as a species, or only a variety of V. angustifolia, I hope the Editors of the Supplement to English Botany will give a figure of it in a future number, the V. sativa and V. angustifolia being now well represented in that work.

4. VICIA LATHYROIDES.

Of this species I have nothing to remark, except that Vicia lathyroides purpureo-caruleis floribus, Herm. Parad. 242. t. 242. Raii Hist. v. 3448. ought to be added to the synonyms, and not referred to V. angustifolia. Hermann, whose figure and description are excellent, received it from Scotland, sent to him by Sutherland. Ray inserts it in his Historia Plantarum, v. 3. copying the description from the Paradisus.

I cannot close these remarks without expressing my regret, that in the English Flora the synonym of Ray, V. luteo flore sylvestris is removed from Vicia lutea to Vicia hybrida. Having, with many other botanists, gathered V. lutea on Glastonbury

Tor-hill,

^{*} As the elder Bobart, the first supervisor of the Oxford Garden, died in 1679, and this plant is not mentioned in the first edition of Ray's Synopsis, it was probably his son and successor in the care of the garden whose name Ray has adopted.

Tor-hill, it seems probable that it was this species which Ray intended, though we have the evidence of a specimen in the Smithian herbarium, marked "from Glastonbury Tor, Somerset." A. B. Lambert, Esq.", that Vicia hybrida has also been discovered there. V. lavigata is likewise well authenticated by specimens from the same gentleman, found near Weymouth. I have never seen the latter growing; but from the specimens in the abovementioned herbarium it appears to me that V. lutea, V. hybrida, and V. lavigata agree in general habit, differing only in the vexillum and legumen, both of which in V. hybrida are hairy, and in V. lævigata smooth, whereas in V. lutea the vexillum is smooth and the legumen hairy. The V. lævigata appears to be unknown to foreigners, though discovered in this country many years since, and mistaken by Hudson for V. hybrida. There are native specimens in the Banksian herbarium, from Portland Island, gathered by Lightfoot in 1774.